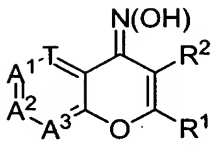
CLAIMS

We claim:

1. A compound of formula **I**:



I

or a pharmaceutically acceptable derivative or mixtures thereof, wherein:

R^1 is $-(L)_mR$, $-(L)_mAr^1$, or $-(L)_mCy^1$;

L is -S-, -O-, -N(R)-, or a C_{1-6} alkylidene chain wherein up to two non-adjacent methylene units of L are optionally and independently replaced by -S-, -O-, -N(R)-, -N(R)C(O)-, -N(R)C(S)-, -N(R)C(O)N(R)-, -N(R)C(S)N(R)-, $-N(R)CO_2-$, -C(O)-, $-CO_2-$, -C(O)N(R)-, -C(S)N(R)-, -OC(O)N(R)-, $-SO_2-$, $-SO_2N(R)-$, $-N(R)SO_2-$, $-N(R)SO_2N(R)-$, -C(R)=NN(R)-, -C(R)=N-O(R)-, -C(O)C(O)-, or $-C(O)CH_2C(O)-$;

m is 0 or 1;

Ar^1 is an optionally substituted 5-7 membered monocyclic ring or an 8-10 membered bicyclic ring having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

Cy^1 is an optionally substituted 3-7 membered saturated or partially unsaturated monocyclic ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, or an 8-10 membered saturated or partially unsaturated bicyclic ring system having 0-5 heteroatoms independently selected from nitrogen, oxygen, or sulfur, wherein;

Ar^1 and Cy^1 are each optionally substituted with up to 5 occurrences of $Z-R^X$; wherein each occurrence of Z is independently a bond or a C_{1-6} alkylidene chain, wherein up to two non-adjacent methylene units of Z are optionally replaced by -S-, -O-, -N(R)-, -N(R)C(O)-, -N(R)C(S)-, -N(R)C(O)N(R)-, -N(R)C(S)N(R)-, $-N(R)CO_2-$, -C(O)-, $-CO_2-$, -C(O)N(R)-, -C(S)N(R)-, -OC(O)N(R)-, $-SO_2-$,

$-SO_2N(R)-$, $-N(R)SO_2-$, $-N(R)SO_2N(R)-$, $-C(R)=NN(R)-$, $-C(R)=N-O(R)-$, $-C(O)C(O)-$, or $-C(O)CH_2C(O)-$;

each occurrence of R^X is independently selected from -R', halogen, NO_2, CN, -OR', -SR', $-N(R')_2$, $-N(R')C(O)R'$, $-N(R')C(S)R'$, $-N(R')C(O)N(R')_2$, $-N(R')C(S)N(R')_2$, $-N(R')CO_2R'$, -C(O)R', -C(S)R', $-CO_2R'$, $-OC(O)R'$, $-C(O)N(R')_2$, $-C(S)N(R')_2$, $-OC(O)N(R')_2$, -S(O)R', $-SO_2R'$, $-S(O)_3R'$; $-SO_2N(R')_2$, $-N(R')SO_2R'$, $-N(R')SO_2N(R')_2$, $-C(O)C(O)R'$, $-C(O)CH_2C(O)R'$, $-NR'NR'C(O)R'$, $-NR'NR'C(O)N(R')_2$, $-NR'NR'CO_2R'$, $-C(O)N(OR')\,R'$, $-C(NOR')\,R'$, $-S(O)_3R$, $-N(OR')R'$, $-C(=NH)-N(R')_2$; or $-(CH_2)_{0-2}NHC(O)R'$; wherein

each occurrence of R is independently hydrogen or an optionally substituted C_{1-6} aliphatic group,

each occurrence of R' is independently hydrogen or an optionally substituted C_{1-6} aliphatic group, an optionally substituted C_{6-10} aryl ring, an optionally substituted heteroaryl ring having 5-10 ring atoms, or an optionally substituted heterocyclyl ring having 3-10 ring atoms; or

R and R' or two occurrences of either R or R' are taken together with the atoms to which they are bound to form an optionally substituted 5-8 membered saturated, partially unsaturated, or aryl ring having 0-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur; or

two occurrences of either R' or R on the same nitrogen are taken together with the nitrogen atom to which they are bound to form an optionally substituted 5-8 membered saturated, partially unsaturated, or aryl ring having 1-4 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

R^2 is hydrogen, CN, -SR, -OR, $-CO_2R$, $-OC(O)R$, $-C(O)R$, $-C(O)N(R)_2$, $-N(R)_2$, $-N(R)C(O)R$, or an optionally substituted C_{1-6} aliphatic group;

T is selected from nitrogen or CR^3;

each of A^1, A^2, and A^3 is independently nitrogen or CR^4 provided that no more than two of T, A^1, A^2, or A^3 are nitrogen;

R^3 is selected from hydrogen, halogen, NO_2, CN, -SR, -OR, $-N(R)_2$, or an optionally substituted C_{1-6} aliphatic group; and

R^4 is selected from halogen, NO_2, CN, $-(L)_mR$, $-(L)_mAr^1$, or $-(L)_mCy^1$; or

two R^4 groups on adjacent atoms are taken together to form an optionally substituted 5-7 membered partially unsaturated or fully unsaturated ring having 0-3 heteroatoms independently selected from oxygen, sulfur, or nitrogen, wherein;

each ring formed by two R^4 groups on adjacent atoms taken together is optionally substituted with up to 4 occurrences of $Z\text{-}R^X$;

provided that:

a) when T is CR^3 where R^3 is H, and A^2 and A^3 are both CR^4 where R^4 is H, R^2 is H and R^1 is $-(L)_mAr^1$, m is zero, and Ar^1 is phenyl, 4-OH phenyl, 3-NO_2 phenyl, 4-OMe phenyl, 4-Me phenyl, or 1,2 ethylenedioxy phenyl, then:

i) A^1 is not CR^4 where R^4 is H, Cl, F, Br, NO_2, or Me;

b) when R^1 is $-(L)_mAr^1$, m is zero, and Ar^1 is phenyl, 4-OMe phenyl, 3,4-diOMe phenyl, or 4-Cl phenyl then:

i) A^3 is not CR^4 where R^4 is Me when R^2 is H, when T is CR^3 where R^3 is H and when A^1 and A^2 are CR^4 where each R^4 is H;

ii) A^3 is not CR^4 where R^4 is Br and A^1 is not CR^4 where R^4 is Me, when R^2 is H, when T is CR^3 where R^3 is H, and when A^2 is CR^4 where R^4 is H;

iii) A^2 is not CR^4 where R^4 is Me, when R^2 is H, when T is CR^3 where R^3 is H and when A^1 and A^3 are each CR^4 where R^4 is H;

iv) A^1, A^2, A^3 are not CR^4 where each R^4 is H, when T is CR^3 where R^3 is H and R^2 is Me;

v) A^1, A^2, A^3 are not CR^4 where each R^4 is H, when T is CR^3 where R^3 is H and R^2 is H;

vi) A^2 and A^3 are not CR^4 where both R^4 groups are taken together to form a fused benzo ring, when T is CR^3 where R^3 is H and when A^1 is CR^4 where R^4 is H;

c) when R^1 and R^2 are H, then:

i) T is not CR^3 where R^3 is H, and A^1, A^2, and A^3 are not CR^4 where each R^4 is H;

ii) A^1 is not CR^4 where R^4 is Cl, NO_2, or Me when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

iii) A^2 is not CR^4 where R^4 is Me, Et, OH, OEt, OMe, or Cl when T is CR^3 where R^3 is H and when A^1 and A^3 are CR^4 where each R^4 is H;

iv) A^2 is not CR^4 where R^4 is Et, OH, OEt, OMe and A^3 is not CR^4 where R^4 is NO_2 when T is CR^3 where R^3 is H and when A^1 is CR^4 where R^4 is H;

v) A^2 is not CR^4 where R^4 is Me, Et, OH, OEt, or OMe and A^3 is not CR^4 where R^4 is NH_2, $-N(CH_2)_2N(n\text{-}Pr)_2$, $-N(CH_2)_2N(Et)_2$, $-N(CH_2)_2NH_2$, $-N(CH_2)_4N(n\text{-}Pr)_2$, or $-N(CH_2)_4N(Et)_2$, when T is CR^3 where R^3 is H and when A^1 is CR^4 where R^4 is H;

vi) A^1 and A^2 are not CR^4 where both R^4 groups are taken together to form a fused benzo or cyclohexyl ring, when T is CR^3 where R^3 is H and when A^3 is CR^4 where R^4 is H;

d) when R^1 is 3,6-dimethylbenzofuran-2-yl or benzofuran-2-yl and R^2 is H, then:

i) A^2 is not CR^4 where R^4 is Me or H when T is CR^3 where R^3 is H and when A^1 and A^3 are CR^4 where each R^4 is H;

ii) A^1 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

e) when R^1 is Me and R^2 is H, then:

i) A^3 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^2 are CR^4 where each R^4 is H;

ii) A^1 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

iii) T is not CR^3 where R^3 is OMe and A^3 is not CR^4 where R^4 is OMe and when A^1 and A^2 are CR^4 where each R^4 is H;

iv) A^1 and A^2 are not CR^4 where R^4 is OMe when T is CR^3 where R^3 is H and when A^3 is CR^4 where R^4 is H;

v) A^2 is not CR^4 where R^4 is OMe and A^1 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^3 is CR^4 where R^4 is H;

vi) A^3 is not CR^4 where R^4 is Me and A^2 is not CR^4 where R^4 is OH when T is CR^3 where R^3 is H and when A^1 is CR^4 where R^4 is H;

vii) T is not CR^3 where R^3 is H and A^1, A^2, and A^3 are not CR^4 where each R^4 is H;

viii) A^3 is not CR^4 where R^4 is Me and when A^2 is not CR^4 where R^4 is OH when T is H and when A^1 is CR^4 where R^4 is H;

ix) A^2 and A^3 are not CR^4 where both R^4 groups are taken together to form a fused benzo ring or a fused furanyl-2-carboxylic methyl ester, when T is CR^3 where R^3 is H and when A^1 is CR^4 where R^4 is H;

f) when R^2 is Me and R^1 is H, then:

i) T is not CR^3 where R^3 is H and A^1, A^2, and A^3 are not CR^4 where each R^4 is H;

ii) A^1 is not CR^4 where R^4 is Me or Cl when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

iii) A^1 and A^3 are not CR^4 where each R^4 is Cl when T is CR^3 where R^3 is H and when A^2 is CR^4 where R^4 is H;

iv) A^3 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^2 are CR^4 where each R^4 is H;

v) A^2 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^3 are CR^4 where each R^4 is H;

vi) A^3 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^2 are CR^4 where each R^4 is H;

g) when R^1 and R^2 are simultaneously Me, then:

i) T is not CR^3 where R^3 is H and A^1, A^2, and A^3 are not CR^4 where each R^4 is H;

ii) A^1 is not CR^4 where R^4 is Me, Cl, or SO_3H when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

iii) A^1 and A^3 are not each CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^2 is CR^4 where R^4 is H;

iv) A^3 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^2 are CR^4 where each R^4 is H;

v) T is not CR^3 where R^3 is Me when A^1, A^2, and A^3 are CR^4 where each R^4 is H;

vi) A^2 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is Me and when A^1 and A^2 are CR^4 where each R^4 is H;

h) when T is CR^3 where R^3 is H and A^1, A^2, and A^3 are CR^4 where each R^4 is H, then:

i) R^1 is not acetyl, propionyl, butyryl or sec-butyryl;

j) when R^1 is Me or Et and R^2 is acetyl or propionyl, then:

i) A^1 and A^3 are not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^2 is CR^4 where R^4 is H;

ii) A^1 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^2 and A^3 are CR^4 where each R^4 is H;

iii) A^1 and A^2 are not CR^4 where both R^4 groups are taken together to form a fused benzo ring, when T is CR^3 where R^3 is H and when A^3 is CR^4 where R^4 is H;

iv) A^2 is not CR^4 where R^4 is Me when T is CR^3 where R^3 is H and when A^1 and A^3 are CR^4 where each R^4 is H;

k) when R^2 is H, SH, OH, -OR, $N(R)_2$, and T is CR^3 wherein R^3 is H, an optionally substituted C_{1-6} aliphatic group, OH, NH_2, SH, OR, halogen or $N(R)_2$, and A^1, A^2, and A^3 are CR^4 where R^4 is hydrogen, halogen or $-(L)_mR$ wherein m is 1, L is -S-, -O-, -N(R)-, and R is H or an optionally substituted C_{1-6} aliphatic group, then R^1 is not:

i) $-(L)_mR$ wherein m is 0 and R is an optionally substituted C_{1-6} aliphatic group; or

ii) $-(L)_mR$ wherein m is 1 and L is -S-, -O-, -N(R)-, and R is an optionally substituted C_{1-6} aliphatic group;

l) when A^2 and A^3 are CR^4 where both R^4 groups are taken together to form a fused benzo ring, and when T is CR^3 where R^3 is H, then R^1 is not:

i) p-chlorostyryl, styryl, p-methylstyryl, or p-methoxystyryl;

and also provided that the following compounds are excluded:

6-Chloro-2-(2,3-dihydro-benzo[1,4]dioxin-6-yl)-chromen-4-one oxime,

3-Acetyl-5-chloro-2,6-dimethyl-chromen-4-one oxime,

2,3-Dihydro-1,5-dioxa-cyclopenta[b]naphthalene-8-one oxime,

4,9-Dimethoxy-7-methyl-furo[3,2-*g*]chromen-5-one oxime,

4,7,9-Trimethyl-furo[3,2-*g*]chromen-5-one oxime,

5,6,7,8-Tetrafluoro-4-hydroxyimino-2-methyl-4H-chromene-3-carboxylic acid ethyl ester,

Nicotinic acid 5-hydroxyimino-9-methoxy-7-methyl-5H-furo[3,2,*g*]chromen-4-yl ester,

Benzoic acid 5-hydroxyimino-9-methoxy-7-methyl-5H-furo[3,2,*g*]chromen-4-yl ester,

4-(2-Diethylamino-ethoxy)-9-methoxy-7-methyl-furo[3,2,*g*]chromen-5-one oxime,

4-Benzyloxy-9-methoxy-7-methyl-furo[3,2,*g*]chromen-5-one oxime,

Acetic acid 5-hydroxyimino-9-methoxy-7-methyl-5H-furo[3,2,*g*]chromen-4-yl ester,

4-Hydroxy-9-methoxy-7-methyl-furo[3,2,*g*]chromen-5-one oxime,

2-(3,4-Dihydroxy-phenyl)-5,7-dihydroxy-chromen-4-one oxime,

6-[4-(1-Hydroxyimino-ethyl)-phenoxy]-5,7-dimethoxy-2-(4-methoxy-phenyl)-chromen-4-one oxime,

8-(4-Acetyl-phenoxy)-5,7-dihydroxy-2-(4-hydroxy-phenyl)-chromen-4-one oxime,

6-(4-Acetyl-phenoxy)-5,7-dihydroxy-2-(4-hydroxy-phenyl)-chromen-4-one oxime,

2-(2,6-Dimethoxy-phenyl)-5,6-dimethoxy-chromen-4-one oxime,

2-(2,4-Dimethoxy-phenyl)-7-methoxy-chromen-4-one oxime,

6-Chloro-3-ethyl-2-methyl-chromen-4-one oxime,

(4-Hydroxyimino-4*H*-chromen-3-yl)-acetic acid,

3-(1-Hydroxyimino-ethyl)-2,6-dimethyl-chromen-4-one oxime,

Acetic acid 3,7-diacetoxy2-(4-acetoxy-phenyl)-4-hydroxyimino-4H-chromen-5-yl ester,

2-(3,4-dimethoxy-phenyl)-3,5,7-trimethoxy-chromen-4-one oxime,

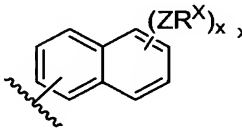
3,5,7-trimethoxy-2-(4-methoxy-phenyl)-chromen-4-one oxime,

8-[4-(1-hydroxyimino-ethyl)-phenoxy]-5,7-dimethoxy-2-(4-methoxy-phenyl)chromen-4-one oxime,

8-[5-(1-hydroxyimino-ethyl)-2-methoxy-phenyl]-5,7-dimethoxy-2-(4-methoxy-phenyl)chromen-4-one oxime,

4-hydroxyimino-7-methoxy-4H-chromen-3-yl)-acetic acid.

2. The compound according to claim 1, wherein R^1 is $-(L)_mAr^1$ and Ar^1 is selected from one of the following groups:



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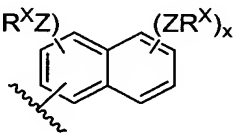

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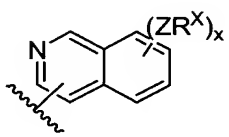

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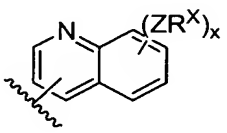

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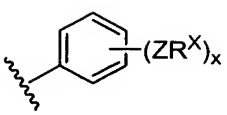

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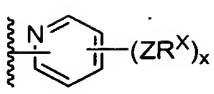

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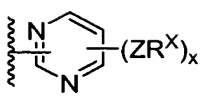

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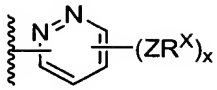

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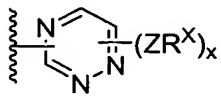

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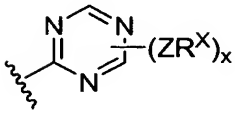

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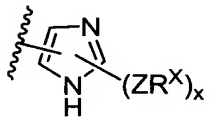

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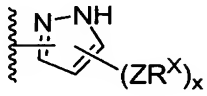

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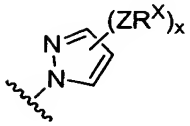

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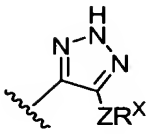

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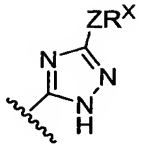

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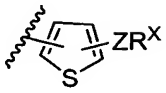

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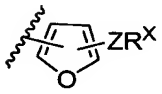

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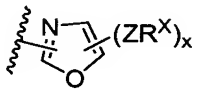

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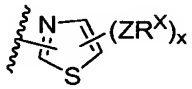

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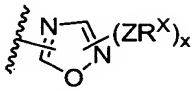
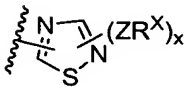
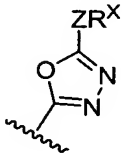


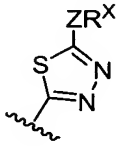
1-20



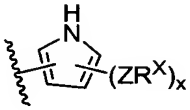
1-21



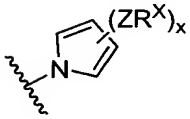
1-22



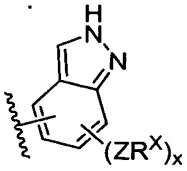
1-23



1-24

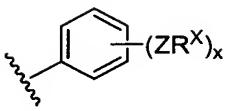


1-25

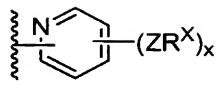


1-26

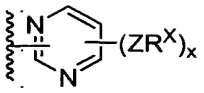
3. The compound according to claim 2, wherein Ar^1 is selected from one of the following groups:



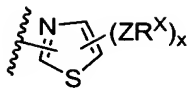
1-5



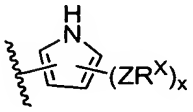
1-6



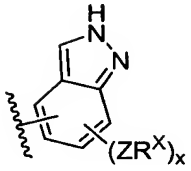
1-7



1-19

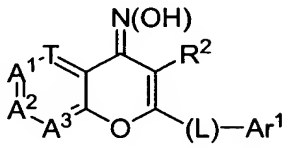


1-24



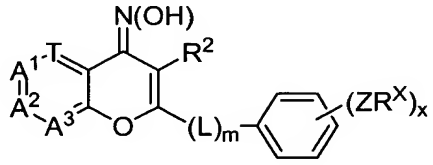
1-26

4. The compound according to claim 2, wherein R^1 is $-(L)_m-Ar^1$, m is 1 and compounds have the formula **IA-1**:



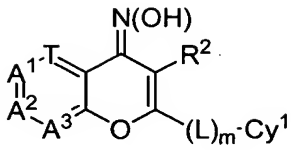
IA-1

5. The compound according to claim 2, wherein Ar^1 is phenyl with 0-5 occurrences of ZR^X and compounds have the formula **IA-1-5**:



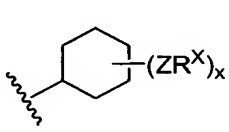
IA-1-5

6. The compound according to claim 1, wherein R^1 is $-(L)_m-Cy^1$ and compounds have the formula **IA-2**:

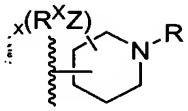


IA-2

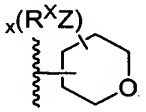
7. The compound according to claim 6, wherein Cy^1 is selected from one of the following groups:



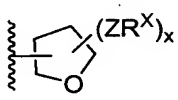
2-1



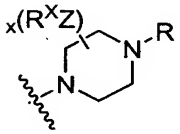
2-2



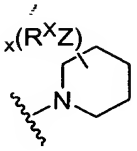
2-3



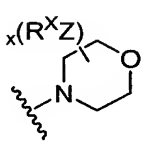
2-4



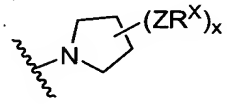
2-5



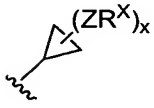
2-6



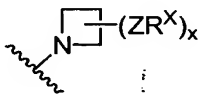
2-7



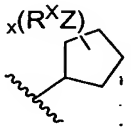
2-8



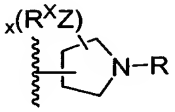
2-9



2-10



2-11



2-12

8. The compound according to claim 2, wherein L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, NRCS, NRCONR, NRCSNR, $NRCO_2$, CO, CO_2, CONR, CSNR, OC(O)NR, SO_2, SO_2NR, $NRSO_2$, $NRSO_2NR$, C(O)C(O), or $C(O)CH_2C(O)$.

9. The compound according to claim 8, wherein L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, CO, CONR, SO_2NR, $NRSO_2$.

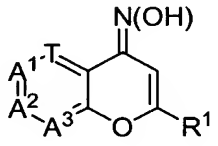
10. The compound according to claim 1, wherein R^1 is $-(L)_mR$, L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, NRCONR, $NRCO_2$, CO, CO_2, CONR, OC(O)NR, SO_2, SO_2NR, $NRSO_2$, $NRSO_2NR$, and R is an optionally substituted C_{1-6} aliphatic group.

11. The compound according to claim 1, wherein R^2 is hydrogen, CN, -OR, $-CO_2R$, -OC(O)R, -C(O)R, $-C(O)N(R)_2$, $-N(R)_2$, -N(R)C(O)R, or an optionally substituted C_{1-6} aliphatic group.

12. The compound according to claim 11, wherein R^2 is hydrogen or an optionally substituted C_{1-6} aliphatic group.

13. The compound according to claim 12, wherein R^2 is hydrogen, methyl, ethyl, n-propyl, isopropyl, or cyclopropyl.

14. The compound according to claim 1, wherein R^2 is hydrogen and compounds have the formula **IB**:

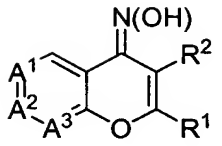


IB

15. The compound according to claim 1, wherein T is CR^3 and R^3 is hydrogen, halogen, CN, or an optionally substituted C_{1-6} aliphatic group.

16. The compound according to claim 15, wherein R^3 is hydrogen, halogen, CF_3, methyl, ethyl, n-propyl, isopropyl, or cyclopropyl.

17. The compound according to claim 1, wherein T is CR^3, R^3 is hydrogen and compounds have the formula **IC**:



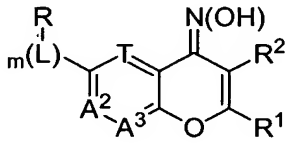
IC

18. The compound according to claim 1, wherein A^1 is CR^4 and R^4 is halogen, CN, $-(L)_mR$, $-(L)_mAr^1$, or $-(L)_mCy^1$.

19. The compound according to claim 18, wherein L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, NRCONR, $NRCO_2$, CO, CO_2, CONR, OC(O)NR, SO_2, SO_2NR, $NRSO_2$, $NRSO_2NR$, C(O)C(O), or $C(O)CH_2C(O)$.

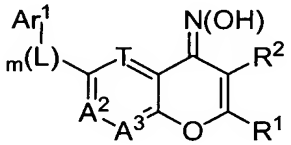
20. The compound according to claim 18, wherein A^1 is CR^4 and R^4 is halogen, CN, or R.

21. The compound according to claim 18, wherein A^1 is CR^4, R^4 is $-(L)_mR$, and compounds have the formula **ID-1**:



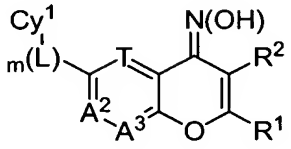
ID-1

22. The compound according to claim 18, wherein A^1 is CR^4, R^4 is $-(L)_mAr^1$, and compounds have the formula **ID-2**:



ID-2

23. The compound according to claim 18, wherein A^1 is CR^4, R^4 is $-(L)_mCy^1$, and compounds have the formula **ID-3**:



ID-3

24. The compound according to claim 1, wherein A^2 is CR^4 and R^4 is halogen, CN, $-(L)_mR$, $-(L)_mAr^1$, or $-(L)_mCy^1$.

25. The compound according to claim 24, wherein L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, NRCONR, $NRCO_2$, CO, CO_2, CONR, OC(O)NR, SO_2, SO_2NR, $NRSO_2$, $NRSO_2NR$, C(O)C(O), or $C(O)CH_2C(O)$.

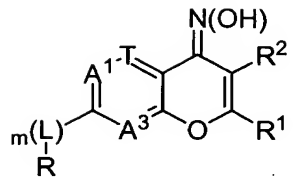
26. The compound according to claim 24, wherein A^2 is CR^4 and R^4 is halogen or R.

27. The compound according to claim 24, wherein A^2 is CR^4 and R^4 is $-(L)_mR$, wherein L is -O- or -N(R)-.

28. The compound according to claim 24, wherein A^2 is CR^4, R^4 is $-(L)_mCy^1$, m is 0 and Cy^1 is **2-2**, **2-5**, **2-6**, **2-7**, **2-8**, or **2-12**.

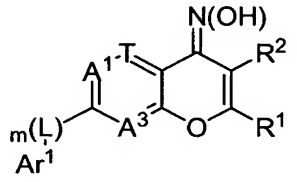
29. The compound according to claim 24, wherein A^2 is CR^4, R^4 is $-(L)_mAr^1$, m is 0 and Ar^1 is **1-5**, **1-6**, **1-11**, **1-12**, **1-13**, **1-19**, **1-24**, or **1-25**.

30. The compound according to claim 24, wherein A^2 is CR^4, R^4 is $-(L)_mR$, and compounds have the formula **IE-1**:



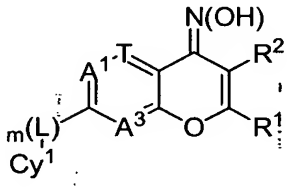
IE-1

31. The compound according to claim 24, wherein A^2 is CR^4, R^4 is $-(L)_mAr^1$, and compounds have the formula **IE-2**:



IE-2

32. The compound according to claim 24, wherein A^2 is CR^4, R^4 is $-(L)_mCy^1$, and compounds have the formula **IE-3**:



IE-3

33. The compound according to claim 1, wherein A^3 is CR^4 and R^4 is halogen, CN, $-(L)_mR$, $-(L)_mAr^1$, or $-(L)_mCy^1$.

34. The compound according to claim 33, wherein L is an optionally substituted C_{1-6} straight or branched alkylidene chain wherein one methylene unit of L is optionally replaced by O, NR, NRCO, NRCONR, $NRCO_2$, CO, CO_2, CONR, OC(O)NR, SO_2, SO_2NR, $NRSO_2$, $NRSO_2NR$, C(O)C(O), or $C(O)CH_2C(O)$.

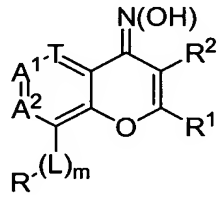
35. The compound according to claim 33, wherein A^3 is CR^4 and R^4 is halogen or R.

36. The compound according to claim 33, wherein A^3 is CR^4 and R^4 is $-(L)_mR$, wherein L is -O- or -N(R)-.

37. The compound according to claim 33, A^3 is CR^4, R^4 is $-(L)_mCy^1$, m is 0 and Cy^1 is **2-2**, **2-5**, **2-6**, **2-7**, **2-8**, or **2-12**.

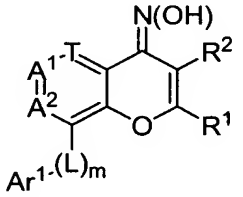
38. The compound according to claim 33, wherein A^3 is CR^4, R^4 is $-(L)_mAr^1$, m is 0 and Ar^1 is **1-5**, **1-6**, **1-11**, **1-12**, **1-13**, **1-19**, **1-24**, or **1-25**.

39. The compound according to claim 33, wherein A^3 is CR^4, R^4 is $-(L)_mR$, and compounds have the formula **IF-1**:



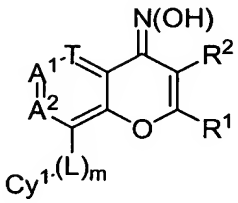
IF-1

40. The compound according to claim 33, wherein A^3 is CR^4, R^4 is $-(L)_mAr^1$, and compounds have the formula **IF-2**:



IF-2

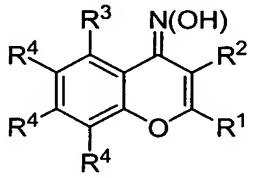
41. The compound according to claim 33, wherein A^3 is CR^4, R^4 is $-(L)_mCy^1$, and compounds have the formula **IF-3**:



IF-3

42. The compound according to claim 1, wherein x is 0-5, and Ar^1 and Cy^1 are independently substituted with 0-5 occurrences of ZR^X.

43. The compound according to claim 1, wherein T is CR^3, A^1, A^2 and A^3 are each CR^4 and compounds have the formula **IG-1**:

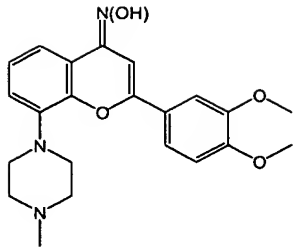


IG-1

44. The compound according to claim 1, wherein x is 0 and Ar^1 is unsubstituted.

45. The compound according to claim 1, wherein each ZR^X is independently halogen, NO_2, CN, or an optionally substituted group selected from C_{1-4} alkyl, aryl, aralkyl, $-N(R')_2$, $-CH_2N(R')_2$, -OR', $-CH_2OR'$, -SR', $-CH_2SR'$, -COOR', or $-S(O)_2N(R')_2$.

46. The compound according to claim 1, selected from one of the following compounds:



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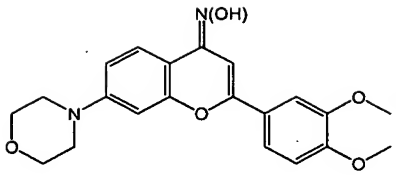

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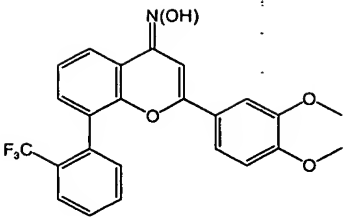

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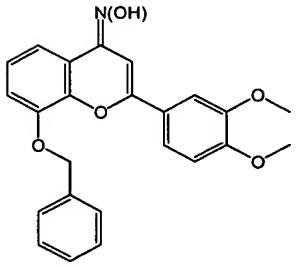

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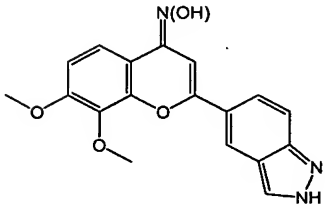

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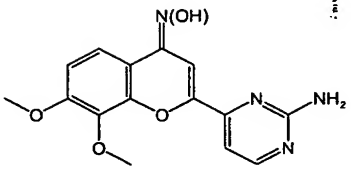

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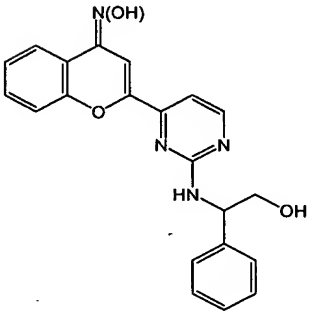

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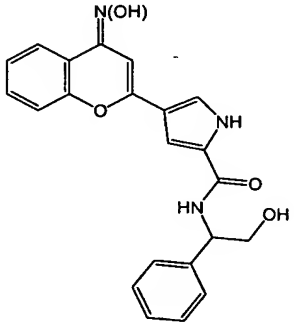

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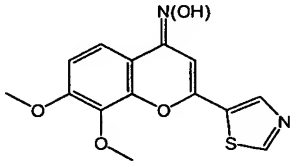

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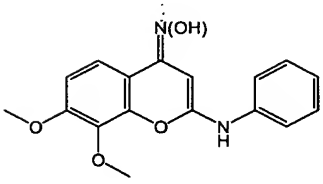

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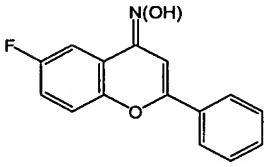

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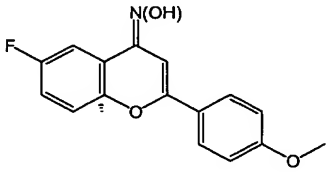

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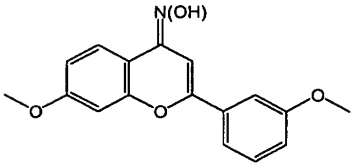

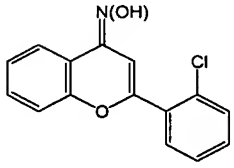

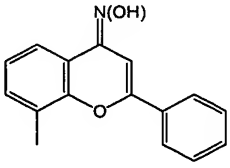

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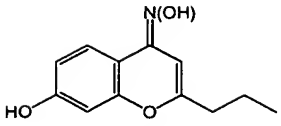

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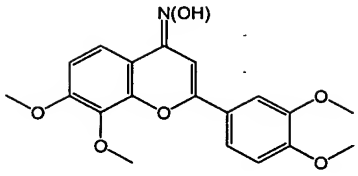

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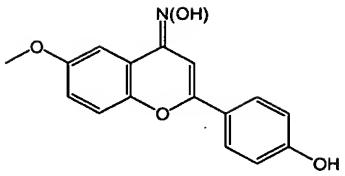

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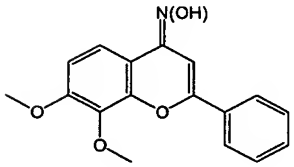

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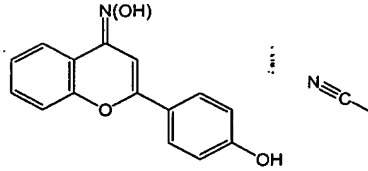

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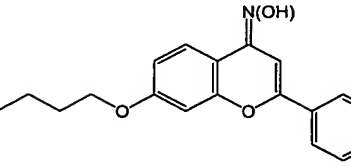

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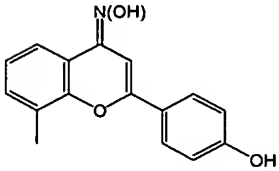

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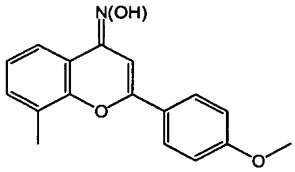

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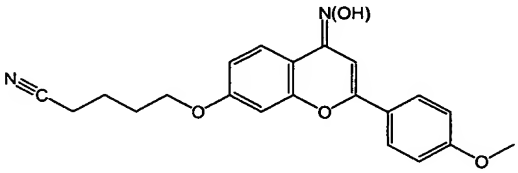

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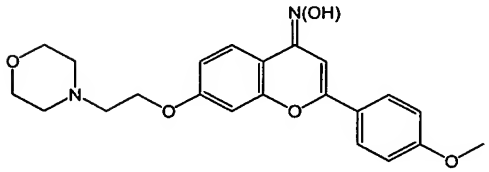

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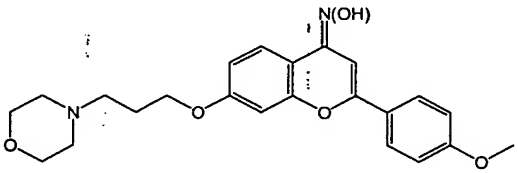

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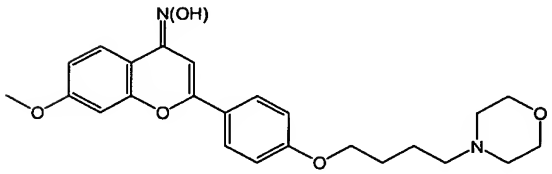

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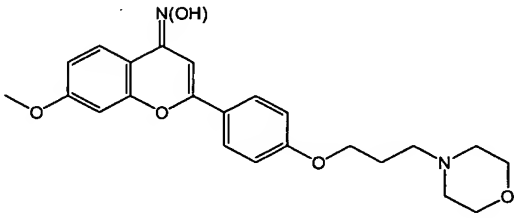

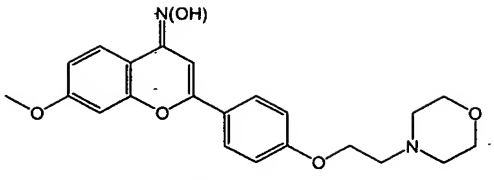

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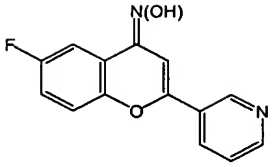

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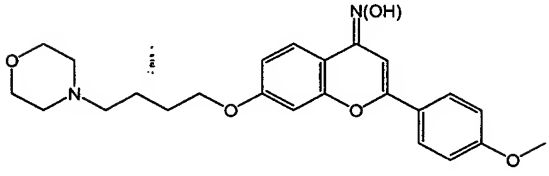

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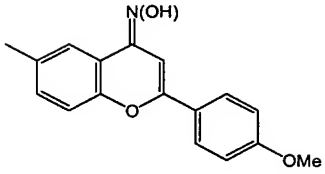

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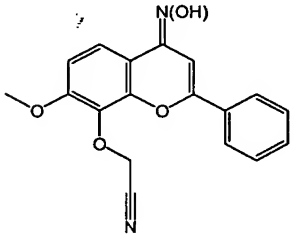

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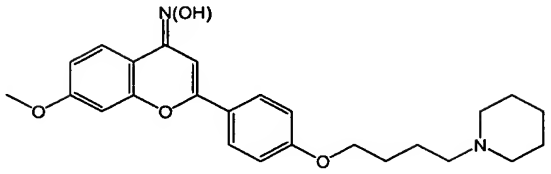

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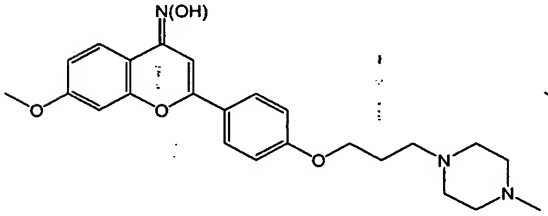

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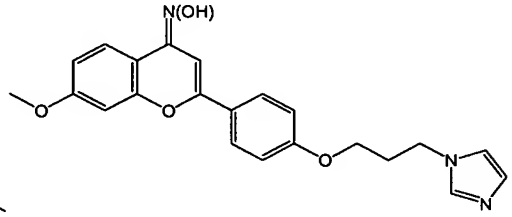

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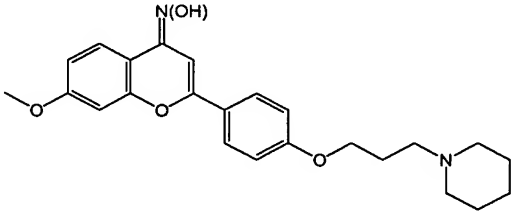

I-37

47. A composition comprising an effective amount of compound of claim 1, and a pharmaceutically acceptable carrier, adjuvant, or vehicle.

48. The composition of claim 47, wherein the compound is in an amount to detectably inhibit CDK-2, cMET, FLT-3, JAK-3, GSK-3, IRAK-4, SYK, p70S6K, TAK-1, or ZAP-70 protein kinase activity.

49. The composition of claim 47, additionally comprising a therapeutic agent selected from a chemotherapeutic or anti-proliferative agent, an anti-inflammatory agent, an immunomodulatory or immunosuppressive agent, a neurotrophic factor, an agent for treating cardiovascular disease, an agent for treating destructive bone disorders, an agent for treating liver disease, an anti-viral agent, an agent for treating blood disorders, an agent for treating diabetes, or an agent for treating immunodeficiency disorders.

50. A method of inhibiting CDK-2, cMET, FLT-3, JAK-3, GSK-3, IRAK-4, SYK, p70S6K, TAK-1, or ZAP-70 kinase activity in:

(a) a patient; or

(b) a biological sample;

which method comprises administering to said patient, or contacting said biological sample with:

a) a composition of claim 47; or

b) a compound of claim 1.

51. The method of claim 50, wherein the method comprises inhibiting CDK-2, cMET, FLT-3, JAK-3, GSK-3, IRAK-4, SYK, p70S6K, TAK-1, or ZAP-70 activity.

52. A method of treating or lessening the severity of a disease of condition selected from cancer, a proliferative disorder, a cardiac disorder, a neurodegenerative disorder, an autoimmune disorder, a condition associated with organ transplant, an inflammatory disorder, an immunologically mediated disorder, a viral disease, or a bone disorder, comprising the step of administering to said patient:

a) a composition of claim 47; or

b) a compound of claim 1.

53. The method according to claim 52, comprising the additional step of administering to said patient an additional therapeutic agent selected from a chemotherapeutic or anti-proliferative agent, an anti-inflammatory agent, an immunomodulatory or immunosuppressive agent, a neurotrophic factor, an agent for treating cardiovascular disease, an agent for treating destructive bone disorders, an agent for treating liver disease, an anti-viral agent, an agent for treating blood disorders, an agent for treating diabetes, or an agent for treating immunodeficiency disorders, wherein:

said additional therapeutic agent is appropriate for the disease being treated; and

said additional therapeutic agent is administered together with said composition as a single dosage form or separately from said composition as part of a multiple dosage form.

54. The method according to claim 52, wherein said disease is cancer, Alzheimer's disease, restenosis, angiogenesis, glomerulonephritis, cytomegalovirus, HIV, herpes virus, varicella-zoster virus, human cytomegalovirus, psoriasis, atherosclerosis, inflammatory bowel disease, sepsis, alopecia, rheumatoid arthritis, diabetes, manic depressive disorder neurodegenerative and neurological diseases, cardiomyocyte hypertrophy, autoimmune diseases, inflammatory diseases, metabolic diseases, cardiovascular diseases, diabetes, Huntington's disease, Parkinson's disease, AIDS-associated dementia, multiple sclerosis (MS), schizophrenia, reperfusion/ischemia, stroke, baldness, acute-myelogenous leukemia (AML, Lou Gehrig's disease), acute lymphocytic leukemia (ALL), mastocytosis and gastrointestinal stromal tumor (GIST), hematopoietic disorders, in particular, acute-promyelocytic leukemia (APL), osteoporosis, hepatitis B virus, proliferative and hyperproliferative diseases, immunologically-mediated diseases including rejection of transplanted organs or tissues and Acquired Immunodeficiency Syndrome (AIDS), reversible obstructive airways diseases including asthma, such as bronchial, allergic, intrinsic, extrinsic and dust asthma, particularly chronic or inveterate asthma (e.g. late asthma airways hyper-responsiveness) and bronchitis, those conditions characterised by inflammation of the nasal

mucus membrane, including acute rhinitis, allergic, atrophic thinitis and chronic rhinitis including rhinitis caseosa, hypertrophic rhinitis, rhinitis purulenta, rhinitis sicca and rhinitis medicamentosa; membranous rhinitis including croupous, fibrinous and pseudomembranous rhinitis and scrofoulous rhinitis, seasonal rhinitis including rhinitis nervosa (hay fever) and vasomotor rhinitis, sarcoidosis, farmer's lung and related diseases, fibroid lung, and idiopathic interstitial pneumonia.

55. The method according to claim 54, wherein said disease is cancer, diabetes, asthma, Alzheimer's disease, osteoporosis, transplant rejection, stroke, rheumatoid arthritis, schizophrenia, neurological or neurodegenerative disease, amyotrophic lateral sclerosis (ALS, Lou Gehrig's disease), or multiple sclerosis (MS).

56. The method according to claim 55, wherein said cancer is selected from renal, colon, breast, prostate, hepatic pancreatic, ovarian or lung cancer, or certain B-cell leukemias or lymphomas.

57. A method for treating or lessening the severity of a stroke, wherein said method comprises administering to a patient in need thereof an effective amount of the composition according to claim 47.

58. A method of inhibiting the phosphorylation of Tau protein in a patient, wherein said method comprises administering to said patient in need thereof an effective amount of the composition according to claim 47.